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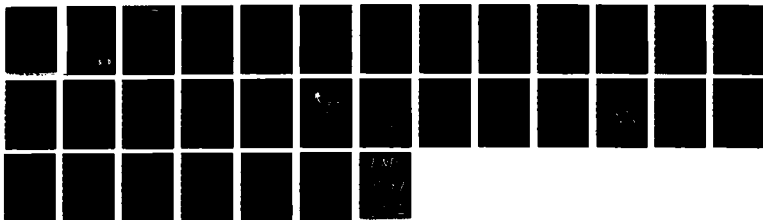
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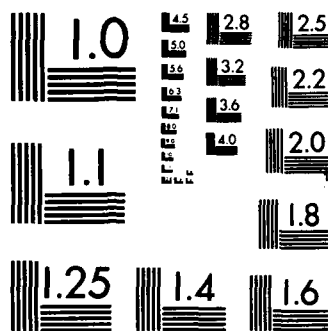
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DOCUMENTARY RESEARCH, SUBMERGED
CULTURAL RESOURCES IN THE VICINITY OF
GULFPORT, MISSISSIPPI

Tim S. Mistovich

AD-A184 103

Submitted to the
U.S. Army Corps of Engineers,
Mobile District

under the provisions of
Contract No. DACW01-87-M-3058

OSM Archaeological Consultants, Inc.
P.O. Box 401
Moundville, Alabama 35474

June, 1987

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER COESAM/PDER-87-005	2. GOVT ACCESSION NO. AD-A187103	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Documentary Research, Submerged Cultural Resources in the Vicinity of Gulfport, Mississippi	5. TYPE OF REPORT & PERIOD COVERED Final-Feb. 87 - June 87	
7. AUTHOR(s) Tim S. Mistovich	6. PERFORMING ORG. REPORT NUMBER COESAM/PDER-87-005	
9. PERFORMING ORGANIZATION NAME AND ADDRESS OSM Archeological Consultants, Inc. P.O. Box 401 Moundville, Alabama 35474	8. CONTRACT OR GRANT NUMBER(s) DACW01-87-M-3058	
11. CONTROLLING OFFICE NAME AND ADDRESS CESAM-BD-ER, Mobile District Corps of Engineers P.O. Box 2288 Mobile, AL 36628-0001	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	12. REPORT DATE June 1987	
	13. NUMBER OF PAGES 30	
	15. SECURITY CLASS. (of this report) Unclassified	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Unlimited		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Maritime History, underwater archeology; shipwrecks; navigation improvements, settlement of Gulfport, Mississippi		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A documentary research program was conducted to ascertain the potential for submerged cultural resources in the vicinity of the Gulfport Mississippi navigation channel in Mississippi Sound and the Gulf of Mexico. This report presents the historical background, history of navigation improvements, and shipwreck compilation for the study area. It was determined that a potential exists for submerged cultural resources in the vicinity of Ship Island. <i>Komodo Maritime Archaeology</i>		

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ABSTRACT

U.S. Army Corps of Engineers studies for navigation improvements at Gulfport, Mississippi, include a consideration of cultural resources. A documentary research program was conducted to ascertain the potential for submerged cultural resources within the project area. This document presents the historical background, history of navigation improvements, and shipwreck compilation for the study area. It is concluded that there is sufficient potential for adverse impact to significant submerged resources within the Ship Island segment of the project to warrant additional investigations.

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INTRODUCTION


A short distance from the south coast of Mississippi lies a unique natural harbor in the otherwise shallow waters of the Mississippi Sound. For over three centuries, ships' captains have used the anchorage at Ship Island as a staging point for exploration, settlement and trade. Less than a century ago, the City of Gulfport was established on the coast to the north of the island, providing a railroad link to the interior during the timber boom years at the turn of the century. The success of Gulfport, then as now, hinged on the development and maintenance of a navigable ship channel between the town and the Ship Island harbor. Gulfport's partner in the construction and improvement of the channel for nearly a century has been the U.S. Army Corps of Engineers (USCOE), which is currently considering new modifications in the form of channel deepening and widening. Prior to such work, the potential impact to cultural resources within the study area (Figure 1) must be considered. Consequently, USCOE, Mobile District commissioned OSM Archaeological Consultants, Inc. to conduct historic research to assess the potential for significant cultural resources and provide recommendations for any additional investigations which might be required.

This document presents the results of the historic research conducted. As the potential project impact will occur within the waters of the Mississippi Sound, the emphasis of the research is on the maritime history of the area. The following section attempts to place both Gulfport and Ship Island within the context of coastal Mississippi maritime development. It is succeeded by a discussion of navigation improvements performed over the last century. Finally, a compilation of recorded vessel losses in the study area is presented, along with a statement of potential impact to submerged cultural resources and recommendations for further investigations.

The bulk of the research in this effort was conducted during February, 1987. A variety of sources were consulted in an effort to provide a comprehensive overview. Previous studies of a similar nature along the northern Gulf Coast provided the structural framework for this research (Coastal Environments 1978, Mistovich and Knight 1983, Mistovich, Knight, and Solis 1983, Mistovich 1987). Much of the primary data was contained within regional repositories: the USCOE Mobile District Technical Library, Mobile Public Library, Harrison County, Mississippi Library, and the Mississippi Department of Archives and History (MDAH), Jackson. Interviews with persons knowledgeable in the maritime activities of the area were conducted. Of particular value was the information provided in this manner by historian M. James Stevens of Biloxi, Mississippi, Captain John Foretich of Gulfport, and Bill Paulus and Carey Ingram of the U.S. Naval Oceanographic Office at Bay St. Louis.

The assistance of the various personnel at these institutions was instrumental to the conduct of this research. Special acknowledgement is due Sam McGahey and Mike Hammack of MDAH, Jackson and Sissy Scott and Mary Gordon of the Technical Library at USCOE, Mobile. Finally, Dorothy Gibbens, USCOE, Mobile archaeologist and project monitor, deserves our appreciation for her guidance over the course of this work.


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II

HISTORICAL BACKGROUND

Gulfport is a relative newcomer to the Mississippi coast, with a history spanning little more than a century. The origins of the city are linked to the visions of a southern railroad baron and a northern entrepreneur, the vast timber resources of late 19th century coastal Mississippi, and the unique natural harbor present at a small barrier island eleven miles offshore.

The Gulf and Ship Island Railroad had held a charter to build a road from Jackson to the Gulf Coast for thirty years when William H. Hardy assumed control of the company in the 1880s. In retrospect, the Civil War and Reconstruction years which delayed construction may have proved beneficial. By the 1880s, the white pine forests in the northern states were exhausted and the lumber companies began acquiring vast tracts of virgin timber in southern Mississippi. Hardy's plans for the Gulf and Ship Island Railroad involved a transportation link traversing the rich woodlands and terminating on the coast at a town which he would build. From this port, the timber could be ferried to the best anchorage on the Mississippi coast, the natural harbor at Ship Island. There, sailing vessels would provide the final link to the markets of the Atlantic Coast and Europe. This system offered substantial improvements over the existing one, in which sawmills scattered along various coastal rivers and bayous floated logs to the Mississippi Sound and thence to coastal towns such as Biloxi or Pascagoula, none of which could accommodate deep draft vessels.

Hardy and his colleagues formed the Union Investment Company, which purchased land in 1884 near the small coastal town of Handsboro for \$5 an acre. The town site was plotted and subdivided into lots and over 36 miles of railroad track laid from Hattiesburg south by 1886. Six years later, however, the company exhausted its funds and the project was abandoned (Lang 1936:82). The tracks were within twenty miles of the new town site.

Three years passed before a new investor was attracted. In 1895, Joseph T. Jones, a northerner who had earned millions in the pioneer oil fields of Pennsylvania, purchased the Gulf & Ship Island Railroad through his Bradford Construction Company. This infusion of new capital allowed completion of the railroad to Gulfport in 1900, one year after the town's incorporation. The effect on the regional timber industry was immediate and dramatic. In 1899, there were eighteen sawmills along the uncompleted length of the Gulf & Ship Island Railroad. By 1902, sixty mills were in place, producing 300,000,000 board feet per year. Within seven years, this output almost tripled and represented 10 percent of the yellow pine lumber in the entire South (Hickman 1973: 215).

Jones virtually poured money into the development of Gulfport. As detailed in the following chapter on navigation improvements, an intensive lobbying effort was made for federal aid in developing a channel and anchorage basin. Even with the approval of this work in 1899, Jones' company outspent the government ten to one in improving the port. The coast at Gulfport offered no natural protective harbor. Jones created one by building two long piers bracketing an anchorage area and protected on the seaward side by a timber and stone breakwater. The character of the town underwent rapid change. The Gulfport Record of July 9, 1904 reported that 26 brick commercial buildings lined the broad avenues of the downtown district. In 1902, there had been none. Resident population grew from 1,000 in 1900 to 6,000 in 1907. Jones' eventual investment in the town and port has been estimated at \$16 million (Lang 1936:84).

The timber boom continued to provide the economic underpinning for south Mississippi in the early years of the twentieth century. In the period 1904-1915, Mississippi ranked third among the United States in lumber production. The highwater mark was reached in 1909, when 1,761 mills produced two billion board feet of lumber (Hickman 1973:214). Jones had brought the first seagoing vessel into Gulfport in January, 1902 by offering a guarantee against damages of \$1,000 to the captain of the Italian schooner Trojan (Lang 1936:83). By 1906, Gulfport was the

largest lumber export city in the nation, shipping 293,000,000 board feet. Additional cargo in the form of naval stores, cotton and cottonseed was brought by rail from the interior and shipped from Gulfport. Two shipyards, Martinoloch and Favre, were constructed in the Gulfport area, specializing in the building of sailing vessels for the Atlantic trade.

The years of the timber boom drew to a close by the time of World War I, with the depletion of the yellow pine forests of the interior. Commercial statistics for the years 1925-1929 reveal a steady decline from 604,000 short tons to 479,000 short tons (USCOE 1929:931). By 1939, the figure had dropped to 240,000 short tons. Lumber remained the leading export product, accounting for 75 percent of trade, but the amount of board feet available had dropped significantly.

Goods imported into Gulfport were varied: asphalt from Trinidad, nitrate from Chile, bananas from the Central American republics. It was the latter product which eventually became the leading import at Gulfport. The first banana boat arrived in 1919. By the early 1960s, bananas constituted the major cargo handled at the port. Major import facilities were built at Gulfport by Standard Fruit and United Brands, transforming the city into a major banana importing terminal. Of the 1.1 million short tons of cargo handled in 1983, bananas constituted more than half the total (Jackson Clarion-Ledger, November 13, 1983).

The history of maritime development at Gulfport requires discussion of an additional component, the anchorage at Ship Island. Other than Pensacola, Ship Island provides the only natural deepwater harbor on the northern Gulf Coast. The developers of Gulfport had this fact uppermost in their minds when selecting a site for the town. The 25 to 40 ft of water depths in the protected anchorage paralleling the northern, protected side of the barrier island had proved safe haven for sea-going vessels for two centuries prior to the arrival of the developers.

Iberville's French fleet was the first to anchor there, arriving on February 10, 1699. French colonial reports called the island Ile de

Surgeres for a number of years, in honor of Comte De Surgeres, a member of the expedition. Early in the 1700s, however, the name was changed to Ile aux Vaisseaux, or Ship Island (Steckel 1975:6). It was immediately utilized as a safe anchorage for ships provisioning the first French coastal settlement at Biloxi. Cargo was lightered into the settlement by longboats. In 1704, the first "filles a la cassette" or casket girls arrived at Ship Island onboard the Pelican (Caraway 1942:78). The 1717 hurricane which destroyed the French anchorage at Dauphin Island to the east increased the strategic importance of Ship Island. The French constructed a warehouse and barracks on the island and brought in the St. Louis in 1720 to serve as a floating warehouse. The first of the German colonists under French sponsorship arrived in 1719. By 1739, twelve thousand had been brought in through the Ship Island anchorage (Steckel 1975:17). The usefulness of the island waned following the development of the port at New Orleans in 1722 and the warehouse facilities were in disuse by 1724.

Control of Ship Island passed from the French to the British in 1763. During the Revolutionary War, the British stationed a 16 gun warship at the anchorage in an effort to arrest smuggling by the colonists. The British returned during the War of 1812, anchoring a fleet of 30 warships and 30 support vessels at Ship Island on December 10, 1814 (Caraway 1942:79). From this staging area, raids were launched on New Orleans. An idea of the size of the anchorage at the island is apparent from the fact that the British 60 vessel fleet fit comfortably within the natural harbor on the western and northern sides of the island (Steckel 1975:26).

Ship Island was one of the locations chosen for a coastal defense fortification in 1856 by Secretary of War Jefferson Davis (Burns 1971). The fort was only partially finished at the outbreak of the Civil War, when it was occupied by a small party of Confederates. The garrison named the fort "Twiggs", after the commanding general at New Orleans, David E. Twiggs (not to be confused with the earlier "Camp Twiggs" on Greenwood Island near Pascagoula; see Mistovich, Knight, and Solis 1983: 33). Only one engagement was fought here during the Civil War. On July

9, 1861, the Union vessel Massachusetts besieged the fort, firing 70 cannon balls, but failing to dislodge the garrison. By September of 1861, however, the Union blockade of the Gulf Coast forced the Confederate evacuation of Fort Twiggs. Marines from the Massachusetts occupied the fort, and it was renamed in honor of the warship. For the duration of the war, Fort Massachusetts served as a staging area for the Gulf Coast theater and a prisoner-of-war camp for captured Confederates. In April, 1865, over four thousand P.O.W.s were held here (Burns 1971:32).

Fort Massachusetts was not completed until 1871. By 1880, it was considered obsolete and essentially abandoned. In 1878, the government built a quarantine station to the east of the fort. This served as a port of entry for immigrants and an isolation station for yellow fever victims (Burns 1971:35). During these same years, the Ship Island anchorage became the main loading point for the lumber which began to stream from the interior in ever increasing quantities. The small coastal settlement of Handsboro served as the main link to the sawmills of the interior, until the building of Gulfport at the turn of the century. As Gulfport lacked deep water approaches during its early years, seagoing steamships and sailing vessels either traveled to and from Gulfport only partially loaded or anchored at Ship Island harbor and were loaded from smaller, shallow draft vessels capable of navigating the 19 ft deep channel extending the 11 miles to Gulfport. Evidence of the bustling character of the Ship Island anchorage is seen in the shipping statistics for the year 1905, during the height of the lumber boom. In that year, 84 steamships, 89 schooners, 49 barks, and 17 "ships" were loaded with 415,000 tons of cargo (USCOE 1905:1291).

Ship Island is now part of the Gulf Island National Seashore. As a barrier island, it is subject to continual, sometimes dramatic, change. The predominant southeasterly wind and wave directions in the Gulf of Mexico result in erosion on the east end of the island and accretion on the west end. Between 1860 and 1948, it is estimated that Ship Island migrated 0.72 miles westward (National Park Service 1979:22). Fort Massachusetts, which was constructed in the center of the western end of the island, is now essentially detached and surrounded by water. Final-

ly, the most dramatic change occurred during the 1969 hurricane, which cut the island in half.

A number of National Register of Historic Places (NRHP) sites in the study area are representative of this historical background. These include the 85 acre Fort Massachusetts Historic District and the 15 acre Ship Island Lighthouse District, administered under the Gulf Island National Seashore. In Gulfport, the 26 acre Harbor Square Historic District represents the city's original central business district. Separate NRHP listings in Gulfport include the U.S. Post Office and Courthouse completed in 1910, the Hewes Building, a commercial structure of the 1903-1904 era, and the antebellum Milner House, also called Grass Lawn.

III

NAVIGATION IMPROVEMENTS

The completion in 1896 of the Gulf & Ship Island Railroad from Gulfport to Hattiesburg provided the critical link between the timber rich Coastal Plain interior of Mississippi and the shipping lanes of the Mississippi Sound. One gap remained, however, in the efficient transport of timber from the interior. This was the eleven miles separating the port facilities at Gulfport and the deep water anchorage at Ship Island. Shallow water depths in this segment of the Sound meant that lumber had to be either lightered or floated the eleven miles from Gulfport to Ship Island. In addition, shallow water over the bar south of Ship Island limited the amount of lumber and agricultural products which could be taken onboard in the Ship Island anchorage. Thus, a vigorous campaign for navigation improvement was begun.

Early surveys of Ship Island Harbor (1881) and Gulfport Harbor (1889) had recommended no improvements (USCOE 1882:1321; 1889:1460). The River & Harbor Act of June 3, 1896, again authorized "preliminary" examinations to be conducted. In a letter dated October 23, 1896, W.H. Hardy wrote that the Ship Island Harbor was the "finest in the world," providing 25 to 40 ft of depth at high tide and located at the convenient midpoint between Mobile and New Orleans. Also, Hardy claimed that no sea-going ship had been lost in the harbor since its first use in "1698." In fact, eight ships in harbor during the October, 1893 hurricane had ridden out the storm relatively unscathed (USCOE 1897:276). While not disputing these claims, the preliminary examination of the area by Major William T. Rossell of the Corps of Engineers, submitted on November 19, 1896, concluded that improvements were not warranted, due to a lack of sufficient trade and the fact that the Gulf & Ship Island Railroad would be the sole beneficiary of any improvements (USCOE 1897: 1709-1710).

Those promoting the Gulfport-Ship Island improvements spent the next two years bolstering their arguments. The USCOE Annual Report of

1899 contains the justifications presented from several sources. A letter from the Mayor and Board of Aldermen dated December 6, 1898, estimates the area's daily capacity at 700,000 ft of pine lumber and states: "that owing to the want of deep water at the pier at Gulfport, this lumber must be transported on barges from the pier to ships at the great expense of \$1/thousand ft, and can only be shipped on vessels coming into port light, as they cannot land to discharge their cargoes, and therefore charge lighter freights" (USCOE 1899:1798).

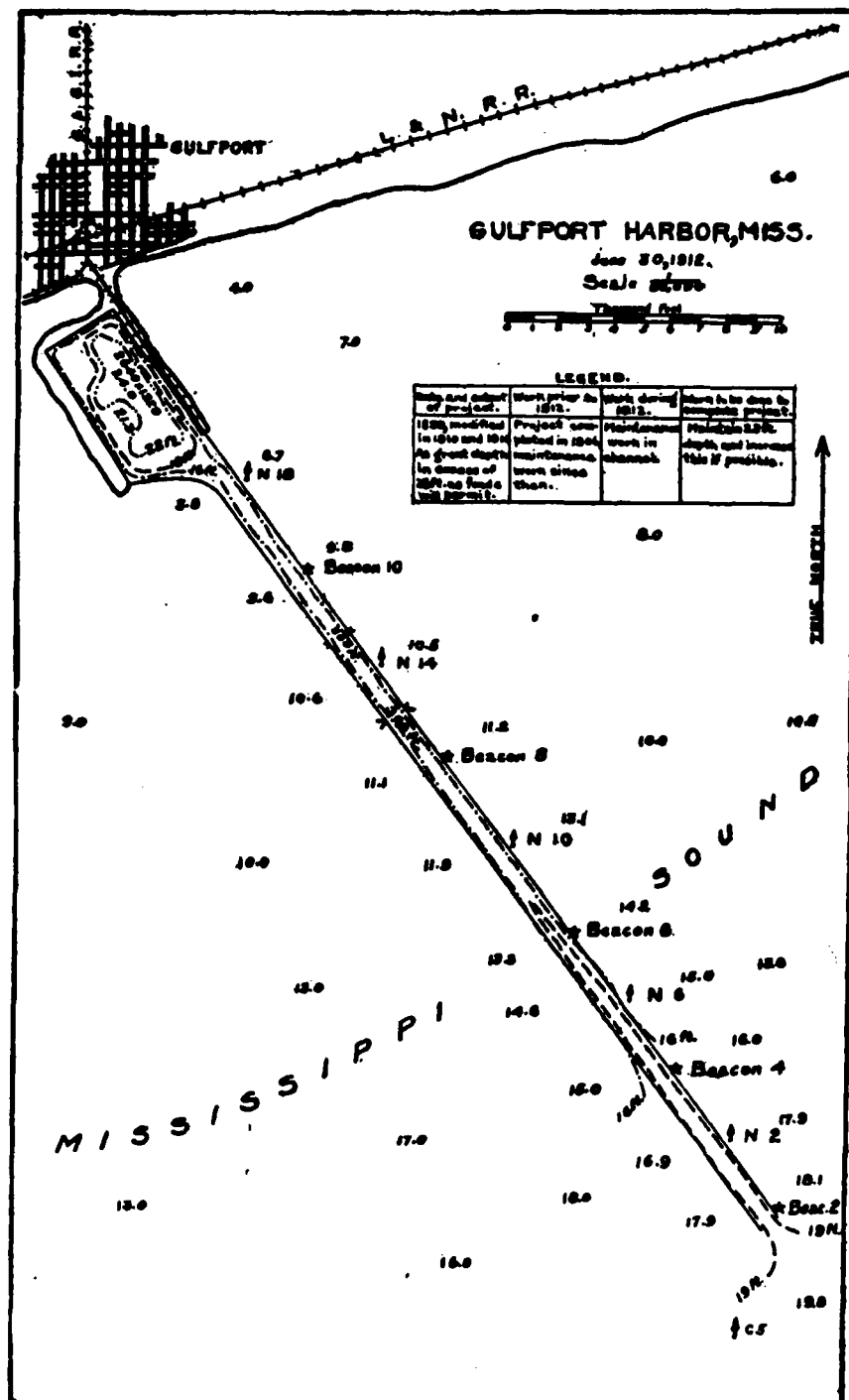
Pointing out the degree of maritime traffic at Ship Island, the Office of the Collector of Customs at Shieldsboro, Mississippi revealed that 155 vessels carrying 152,390 tons of freight had used the harbor during fiscal year 1897, adding that the low water at the Ship Island bar caused delays of seven to ten days and presented serious risks of grounding (USCOE 1899:1813). The Customs Office at Biloxi noted that large draft vessels could not take on a full cargo at Ship Island and pass over the bar when depths decreased to less than 27 ft at mean low tide. As a result, ships would only take on part of their cargo in the harbor, then anchor south of the bar to finish loading (USCOE 1899:1813).

Apparently, the campaign for navigation improvement had an effect. On June 16, 1898, Congress ordered another survey to determine a plan for a 26 ft deep channel at mean low water through Ship Island Pass (H. Doc. 120, 56th Congress, 3rd Session). Major Rossell was again put in charge of the survey, to begin in July, 1898, but delayed until November of that year, "owing to threatened yellow fever" (USCOE 1899:1787). Authorization for the work was passed in the following year in the River and Harbor Act of March 3, 1899. This legislation provided for a channel 300 ft wide and 19 ft deep (at mean low water) from the anchorage at Ship Island to Gulfport, as well as the construction at the end of the channel (next to shore) an anchorage basin of similar depth and not less than 2,640 ft by 1,320 ft in area. A separate provision was made for Ship Island Pass, where a 26 ft deep channel was proposed across the bar from the inner to outer 26 ft depth curve in the Gulf of Mexico. The cost for the Gulfport channel and basin improvements was not to exceed

\$150,000, with \$10,000 per year appropriated for maintenance over a five year period, while \$40,000 was appropriated for Ship Island Pass (USCOE 1899: 312, 1722). At the time of this act, water depths over the line of the proposed Gulfport to Ship Island channel varied from 8.9 to 17.9 ft and averaged 9 ft deep in the proposed basin area.

Work began on the Ship Island Pass channel in November, 1899. By March 13, 1900, the National Dredging Company of Wilmington, Delaware had removed 163,401 cubic yards of sand, clay and mud to form a channel 4,000 ft long, 300 ft wide and 26 ft deep from the inner to outer 26 ft contour line. Vessels of up to 25 ft draft could now consistently cross the bar (USCOE 1900:2217). Dredging of the Gulfport channel and anchorage basin was delayed until April 16, 1901 (USCOE 1902:306). The channel portion was declared complete by August, 1903 (USCOE 1904:338) and the basin by June, 1905 (USCOE 1905:349) (Figures 2 and 3). However, the 1925 Annual Report of the Chief of Engineers reveals that, due to dredging problems encountered, the maximum project dimensions were not reached until 1924. Also of note is the contribution of the Gulf & Ship Island Railroad to the harbor improvements. Certainly the major beneficiary of the improvements, it was also the major contributor, spending an estimated \$1.6 million for dredging on the Gulfport channel and anchorage basin during the formative years of the project.

In the following years, the Gulfport channel/basin and Ship Island Pass projects were combined under the River & Harbor Act of March 2, 1907 (H. Doc. 184, 59th Congress, 2nd Session). The River and Harbor Act of February 27, 1911 authorized the transfer of a government dredge-boat to Gulfport for maintenance dredging in the face of rapid channel silting in the Mississippi Sound (River & Harbor Commission Document No. 2, 60th Congress, 1st Session). This continued to be a navigation problem, as evidenced in the Annual Report of 1919, wherein a request is made for additional maintenance funds in the face of channel shoaling at a rate of 2.6 million cubic yards a year (USCOE 1919:940). This followed a year when commerce into Gulfport amounted to 179,924 short tons valued at \$3.6 million, 88 percent of which was lumber (USCOE 1919:941).



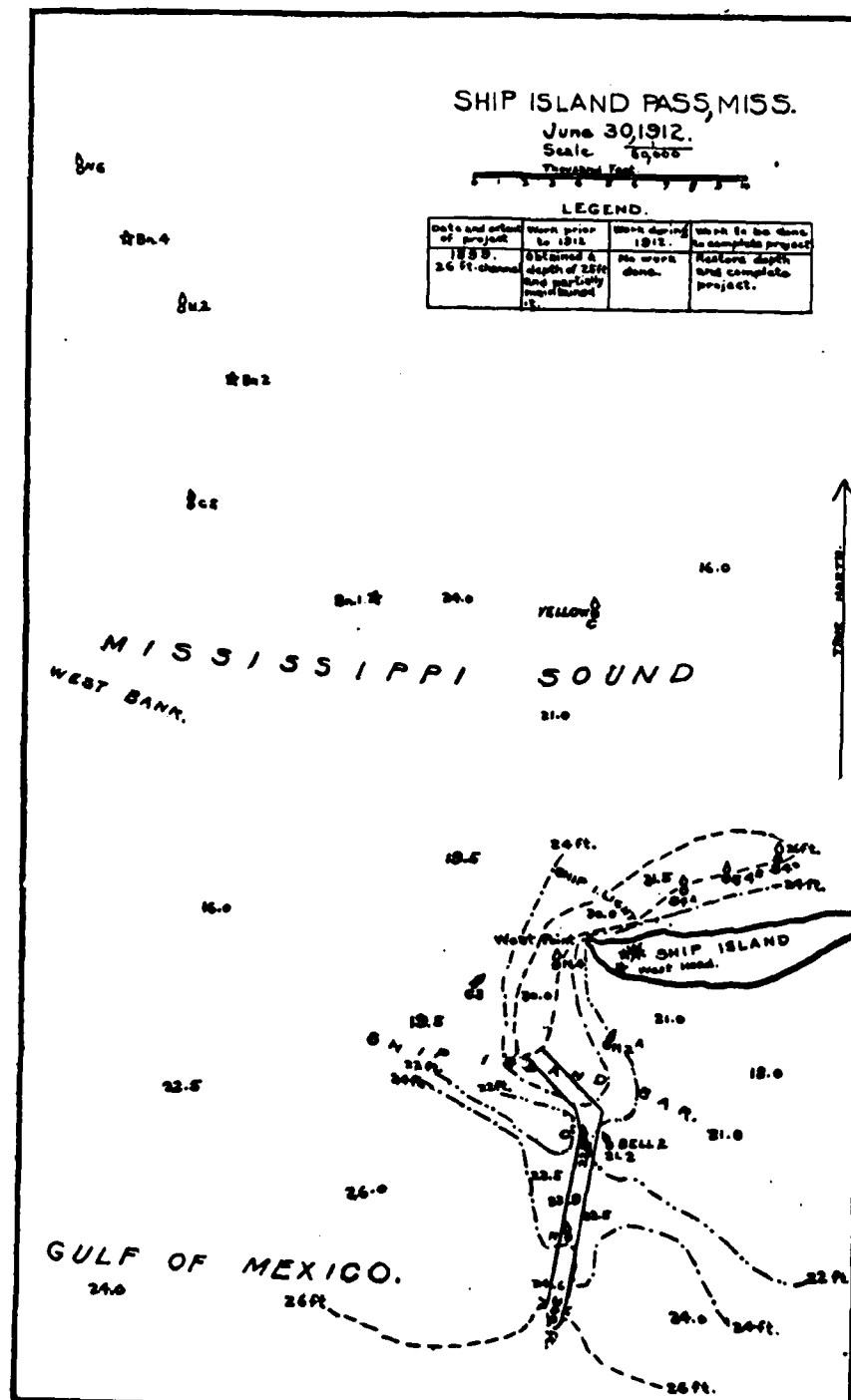


Figure 3. Ship Island Pass, 1912 (USCOE, Mobile).

In the face of rapid channel shoaling and increasingly expensive maintenance dredging, two modifications to the project were approved in the River and Harbor Act of January 21, 1927 (H. Doc. 692, 69th Congress, 2nd Session). The width of the Gulfport channel was reduced from 300 ft to 220 ft as a result of shoaling estimated at 4 million cubic yards annually. The channel across Ship Island Bar was to be relocated 5,000 ft west of the existing channel, thus providing a shorter, more direct route and avoiding hard sand deposits in the existing channel which proved difficult to dredge (Figure 4). Annual maintenance costs in 1927 had reached \$185,000 (USCOE 1934:582).

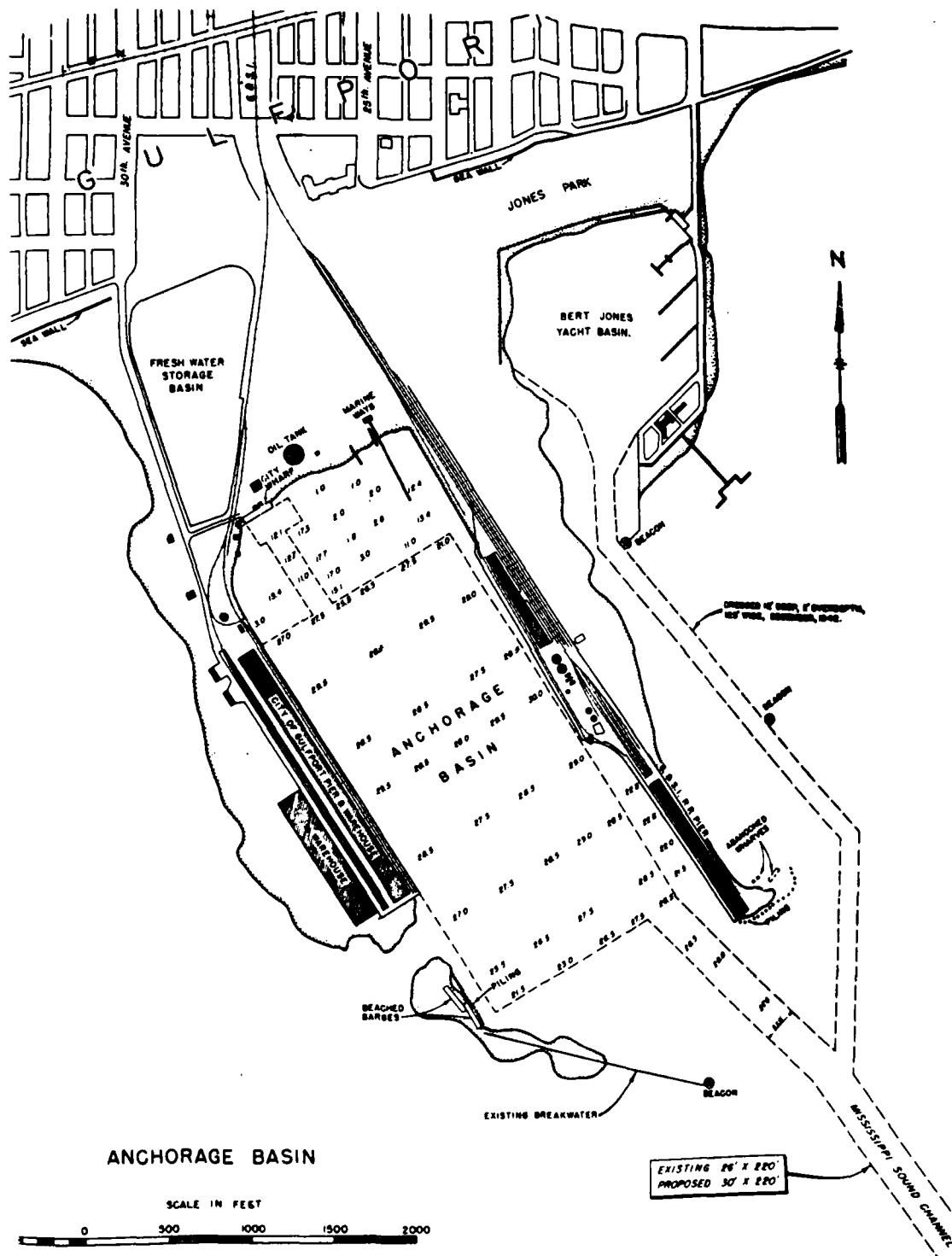
The Gulfport channel depth remained at the authorized 19 ft depth at a time when ocean-going steamers were increasing in size and draft. The larger vessels were forced to either anchor at Ship Island and lighter their cargos to the docks at Gulfport or enter and leave port only partially loaded. To alleviate this condition, the River and Harbor Act of July 3, 1930 provided for a channel 27 ft deep and 300 ft wide across the Ship Island Bar, a channel 26 ft deep and 220 ft wide through the Mississippi Sound to Gulfport, and a depth of 26 ft within the anchorage basin at Gulfport. These improvements were started in 1932 and completed in 1934 at a cost of \$118,000 (USCOE 1935:675).

From 1942 until early 1946, the U.S. Navy leased the port facilities at Gulfport as a transshipment point for war material. To provide for Navy vessels, the Gulfport channel was dredged "several feet" below project depth in 1944 (USCOE 1948:994). Shortly after the war, the River & Harbor Act of June 39, 1948 authorized further channel improvements. The Ship Island channel was extended to 32 ft deep and 300 ft wide over a distance of 8 miles, the Gulfport channel modified to 30 ft deep and 220 ft wide for a distance of 11 miles, and the Gulfport anchorage increased to a depth of 30 ft within a 1,320 ft wide by 2,640 ft long area (H. Doc. 112, 81st Congress, 1st Session). This work was completed in April, 1950 at a cost of \$636,000 (USCOE 1950:906).

Improvements to the harbor facilities at Gulfport were historically a partnership venture of local interests and the federal government.

The harbor built by the Gulf & Ship Island Railroad in the late 1800s, and dredged with government aid in 1899, consisted of long piers projecting from shore into the Mississippi Sound and protected by a timber and stone breakwater bearing southeast from the end of the west pier. A replacement timber and stone breakwater was constructed in 1924 under state and city sponsorship, with Corps of Engineers support. This stretched from a point 950 ft south of the southern end of the west pier, for a distance of 1,400 ft southeast into the Mississippi Sound. By 1948, the breakwater had fallen into disrepair and the gap between the west pier and the breakwater filled by two beached steel barges (H. Doc. 112, 81st Congress, 1st Session). Local interests developed a 26 acre small boat harbor to the east of the anchorage basin in 1950 (Figure 5). This was served by a 100 ft wide, 8 ft deep, and 4,300 ft long approach channel. The River & Harbor Act of July 3, 1958 authorized government maintenance of the small boat harbor and channel, on the condition that local interests provided spoil areas and easements (S. Doc. 123, 84th Congress, 2nd Session).

Over the course of nearly a century of channel maintenance, the spoil areas for disposal of dredged material have been in generally the same locations. An undated map by Major Rossell (presumed to be from the late 1890s) entitled "Sketch Showing Proposed Location of Dredged Channel and Anchorage Basin at Gulfport, Mississippi," designates "dumps" to the north, south, and west of the proposed anchorage basin and to the east of the Gulf & Ship Island Railroad pier flanking the basin on the east. Later, a USCOE project map shows spoil areas 1,500 ft south of the breakwater and parallel to the Gulfport channel at a distance of 2,000 ft west in 1961. In 1962, the project map locates the spoil areas parallel to the entire length of the Gulfport channel, at a distance of 2,000 ft to both east and west. Disposal areas for the Ship Island Bar channel on the 1985 project map are located parallel to the channel and at a distance of 3,300 ft to the west and 4,050 ft to the east.



IV

SHIPWRECK COMPILATION AND CONCLUSIONS

Proposed modifications to the navigation channel at Gulfport will result in a narrow impact corridor along the line of the current channel. The following compilation of reported shipwrecks encompasses a somewhat larger area in the interest of thoroughness, as wreck locations are rarely specific. The study area investigated covers the sea approaches to the Ship Island channel, including Ship and Cat Islands, the Mississippi Sound between the barrier islands and the coast, and the port facilities at Gulfport (Figure 6). This is an area from roughly 30° north latitude to the coast and from 88°50' to 89°10' west latitude.

The most comprehensive source for shipwrecks in the area is Berman (1972). He lists 34 recorded wrecks for the Mississippi Sound in general. Ten of these, lost in the period 1845 to 1915, are within the study area:

The Edward E. Barrett, a 69 ton schooner built in 1883 and stranded on Ship Island on July 5, 1916.

The Emerald, a 419 ton sidewheel steamer built in 1859 and snagged at Cat Island on January 5, 1868, with three lives lost.

The Flourine, a 386 ton bark built in 1881 and stranded on Cat Island on September 17, 1906.

The Fred W. Ayer, a 387 ton schooner built in 1903 and stranded on Ship Island on September 22, 1920.

The Galveston, a 545 ton sidewheel steamer built in 1845 and stranded on Ship Island on November 25, 1851.

The Jennie S. Hall, a 450 ton schooner built in 1881, which foundered at Gulfport on August 14, 1916, with all lives (7) lost.

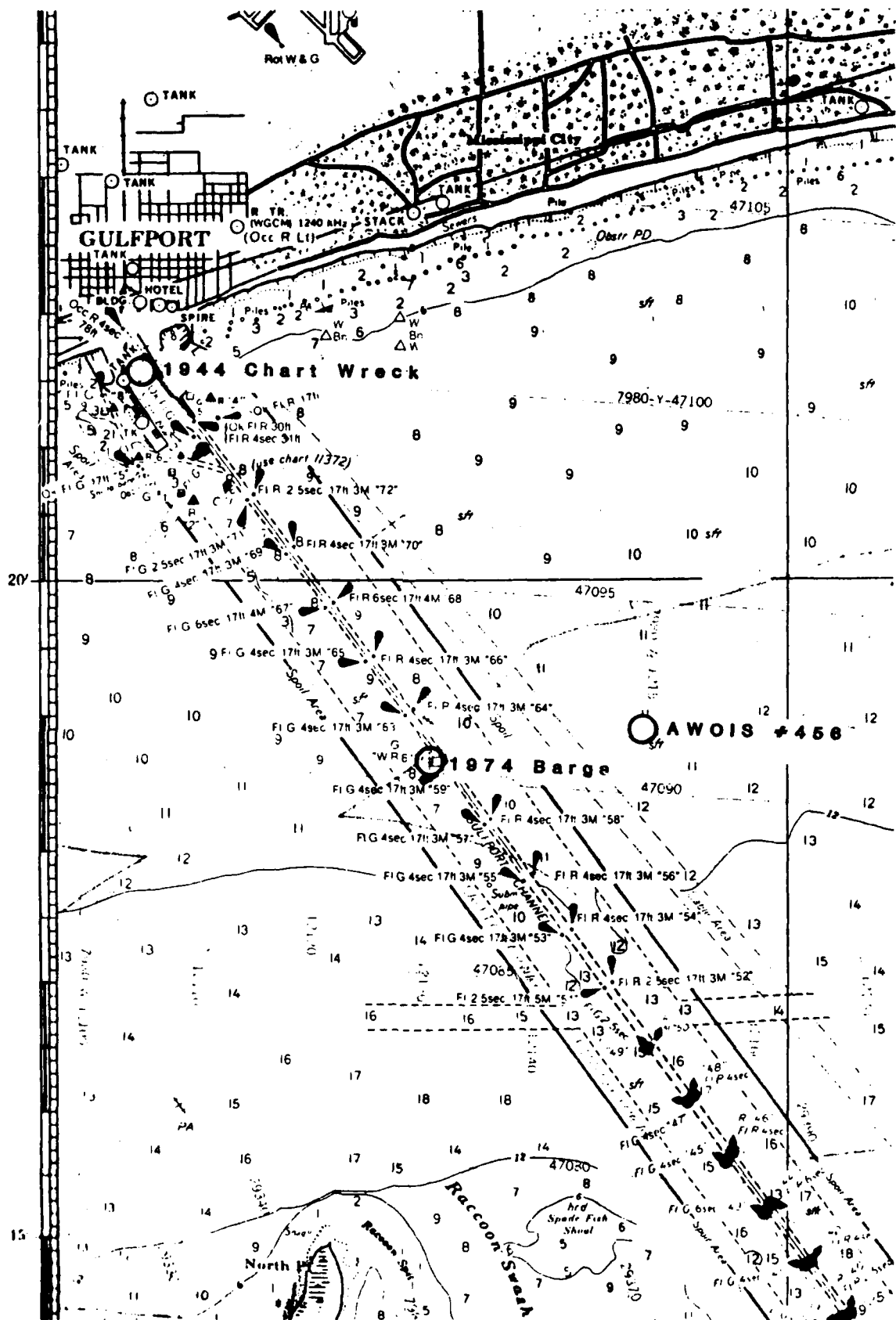


Figure 6. Reported Vessel Losses in Study Area.

The Ludlow, a 762 ton schooner built in 1900, which burned at Gulfport on May 27, 1925.

The Mary G. Dantzler, a 490 ton schooner built in 1915, which foundered off Ship Island on July 5, 1916, with all lives (8) lost.

The William C. Young a 199 ton sidewheel steamer built in 1854, which foundered at Ship Island on August 15, 1860, with seven lives lost.

The Mist, a steamer (?) built in 1863, which was lost at Ship Island on an unknown date.

A review of available primary sources was performed in an attempt to provide more detail on these vessel losses. Editions of coastal Mississippi newspapers preserved on microform at the Mississippi Department of Archives and History, Jackson and the Harrison County Public Library, Gulfport, contained details on three of the vessels. The newspaper collection is not complete for this area and no additional information was available for the pre-twentieth century wrecks (the Emerald, Galveston, William G. Young, and Mist). Somewhat surprisingly, no mention of the fates of the Fred W. Ayer (1920), Jennie S. Hall (1916), and Ludlow (1925) was made in coastal newspapers in the days following the mishaps. Details were located on the final three vessels, the Edward E. Barrett (1916), the Flourine (1906), and the Mary G. Dantzler (1916), all victims of hurricanes.

The headline of the Biloxi Daily Herald of September 27, 1906, proclaimed a "Worse storm than that of October, 1893 . . . Broke in its greatest fury early this morning." Hundreds of schooners and small boats which had sought refuge in the Back Bay at Biloxi had been swept into shore by high winds, tangling up against wharves and shipyards. In the next day's edition, little damage was reported in Gulfport . . . "The big pier . . . and the vessels in the harbor suffered comparatively no damage." Four vessels anchored at Ship Island, however, were beached or sunk. The Flourine was reported ashore at Goose Point (formerly on

the island's north shore). The wood-hulled Norwegian ships Hercules and Magdeline were lost, while the iron hulled bark Nunberg was stranded on shore (and later refloated). The main quarantine station on the island had been destroyed by the storm. Three or four schooners were beached at Gulfport, with one capsized and another sunk in the anchorage. Interestingly, the "finest pilot boat on the gulf", the Edward E. Barrett, safely rode out the storm at anchor midway between Ship Island and Biloxi.

The 1916 hurricane proved equally devastating. The Daily Herald (9/7/1916) reported an estimated 30 to 40 boats destroyed in the Biloxi/Gulfport region. Although no ships in Gulfport Harbor were seriously damaged, the barge Champion was "beat to pieces on the west side of the basin," and two schooners were beached on the port's west side.

At Ship Island, the large Norwegian vessel Ancenis, with a million feet of lumber on board, was holed and reported slowly sinking. Fear was expressed for the Mary G. Dantzler, carrying a load of phosphate and commanded by Capt. L.S. Foster, recently married and on a bridal trip with his wife. The Edward E. Barrett, survivor of the 1906 storm, was reported beached near the center of the west end of Ship Island. Joining it was the 1,500 ton barge Bernice and, farther to the east, the four masted ship John Meyer.

On the following day (September 8), the Ancenis was reported beached on the island. It would later be floated and towed to Mobile for repairs (Biloxi Daily Herald, 7/13/1916). The schooners Mary G. Dantzler and M.A. Achorn, however, were washed out to sea and sank, "all trace of them and their crews being lost." Debris from the Dantzler was found on the 10th of September off Deer Island and the west beach in Biloxi. Captain Foster and his wife, along with seven crewmen, were never found. Joining the casualty list that day was the mailboat Hermes, reported wrecked on the south side of Ship Island.

It is reasonable to assume that most of the vessels beached at Ship Island and Gulfport Harbor were salvaged, either refloated, as in the

case of the Ancenis, or broken up and usable vessel components and cargoes recovered. One example of later salvage is reported in the U.S. Army Corps of Engineers Annual Wreck Removal Report for 1919. An unnamed vessel sunk on the east side of Gulfport Harbor was "blasted with dynamite and the wreckage removed" (USCOE 1919:1991). This is the only wreck removal reported in the study area in the annual listings for the years 1899 to 1924. Those lost offshore, however, such as the Dantzler, Achorn, and Champion, were broken up by storm action and claimed by the sea.

The 1982 edition of the navigation chart for the study area (#11373) contains thirteen wreck symbols within three nautical miles east and west of the Gulfport channel (Figure 6). Five of these are located within the safety fairway. A search of available charts, dating back to 1908, was conducted to determine the antiquity of these wrecks. The symbols on the current chart apparently represent recent shipwrecks, as they do not appear on charts as late as 1944, but are marked on the 1974 chart. Symbols on charts predating 1944 are later removed. This is the case for a wreck located north of Ship Island's West Point in 1920 (Chart 1267) which is removed by 1933 (Chart 1267) (Figure 6). The 1944 edition of chart 1267 locates a wreck at the extreme north end of the Gulfport anchorage basin (Figure 6). This symbol does not appear on the 1974 or 1983 editions of Chart 11373. It can be assumed that these vessels no longer posed a hazard to navigation and thus were not plotted on the charts, or they were salvaged. Both situations occur regularly in the case of small, local vessels. John Foretich, captain of a Gulfport pilot boat, reports that most of the chart symbols in the channel areas represent fishing vessels or private yachts which have been removed or have broken up on the seafloor (Interview of February 17, 1987).

Captain Foretich also reported that the symbol near beacon 61 A three miles from Gulfport represents a 110 ft barge loaded with slabs of concrete destined for erosion control at Fort Massachusetts in 1974 (Figure 6). In addition, the barges placed in the gap between the breakwater and anchorage basin at Gulfport in 1948 (see Figure 5, Section III) have completely disintegrated.

Several other sources provide nonspecific data on potential shipwrecks in the study area. The National Oceanic & Atmospheric Administration's AWOIS printout lists an unknown bottom obstruction (#456) one mile east of the safety fairway (Figure 6). Marx (1975:186) reports that two unidentified Spanish caravels, sent on an exploration voyage from Veracruz, wrecked on the south side of Ship Island in 1643. Marx's contention that the island derived its name from this incident is not supported by the later French accounts. Finally, a copy of an early newspaper account in the possession of local historian M. James Stevens details the fate of the steamer Red Chief. On June 4, 1866, the Red Chief, enroute to New Orleans with a cargo of lumber, was caught in a severe gale while entering Ship Island Pass. "She sprang a leak and sunk in eighteen feet of water, and is a total wreck. No lives were lost" (New Orleans Times, June 6, 1866).

It is apparent that the level of maritime activity in the Ship Island and, more recently, Gulfport locales has been matched by the frequency of maritime disasters. In addition, for every vessel loss noted in some form or fashion, there probably exists another whose record is now obscure. The preceding compilation does not include any historically significant shipwreck with an exact location known to be within the Gulfport channel. The potential for the existence of such a wreck, however, cannot be discounted. This is particularly true of the Ship Island Pass and historic anchorage off the western end of the island. With such a potential in mind, it is recommended that a remote sensing survey of that portion of the channel between beacons 37 and 13 be conducted. Identification of potential shipwreck sites can be accomplished using a proton magnetometer and a side scan sonar as minimal instrumentation. Range-range positioning and 50 m survey lane spacing will insure accurate and comprehensive coverage of the area. These procedures are recommended prior to proposed channel modifications.

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